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EXAMINER	
PARK, ILWOO	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/658,229	DU ET AL.	
	Examiner	Art Unit	
	Ilwoo Park	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *42-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 42-44, 46-52, and 54-60 are amended. Claims 42-60 are presented for examination. Jacobs et al and Lee were cited in the last office action.

Response to Arguments

2. Applicant's arguments with respect to claims 42-60 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 42, 49, 50, 53, 59, and 60 are rejected under 35 U.S.C. 102(e) as being anticipated by Jacobs et al. [6,279,056 B1].

As for claim 42, Jacobs et al teach a controller [e.g., "firmware within the audio CD ROM 60" in fig. 2 and col. 5, lines 40-47] for enabling [col. 2, lines 7-21] a plurality of audio files to be played on a computer subsystem [e.g., CD-ROM drive 28 in fig. 1] of a computer system [computer system S in fig. 1] if said computer system is in an inactive state, said controller comprising:

a switch [operating states] having a first state [non-audio CD mode or PC mode in col. 4, lines 36-42] and a second state [audio CD mode in col. 4, lines 27-35], wherein

said switch in said first state decoupies ['BIOS ROM 62 is coupled and the audio CD ROM 60 is decoupled' in col. 5, lines 29-37] said controller from said computer subsystem and from an audio integrated circuit (IC) [e.g., CD-ROM drive controller 102 in fig. 1] coupled to said computer subsystem, and wherein said switch in said second state couples [col. 5, lines 37-39] said controller to said computer subsystem in response to said computer system being in said inactive state ["without running operating system" in col. 4, lines 32-35]; and

a drive interface [e.g., mini CD-ROM device driver 68 in fig. 2] configured to interface with a drive of said computer subsystem depending on a state of said switch, wherein said drive interface is configured to access audio data on said drive if said switch is in said second state.

5. As for claim 49, Jacobs et al teach a function key interface responsive to a plurality of function keys, wherein said plurality of function keys generates a plurality of user commands to said controller through said function key interface [col. 5, line 66-col. 6, line 7].

6. As for claim 50, Jacobs et al teach a processor for controlling said state of said switch [see fig. 3].

7. As for claim 53, Jacobs et al teach said audio data comprising non-compressed audio data [conventional audio CD player in col. 1, lines 45-49].

8. As for claim 59, Jacobs et al teach a method for playing a plurality of audio files in a computer system [computer system S in fig. 1] comprising a computer subsystem [e.g., CD-ROM drive 28 in fig. 1], said method comprising:

decoupling ['BIOS ROM 62 is coupled and the audio CD ROM 60 is decoupled' in col. 5, lines 29-37] an audio controller [e.g., "firmware within the audio CD ROM 60" in fig. 2 and col. 5, lines 40-47] from said computer subsystem and from an audio IC [e.g., CD-ROM drive controller 102 in fig. 1] coupled to said computer subsystem if said computer system is in an active state [PC mode in col. 4, lines 18-42];

coupling [col. 5, lines 37-39] an audio controller [e.g., "firmware" in fig. 2 col. 5, lines 40-47] to said computer subsystem if said computer system is in an inactive state [audio CD mode in col. 4, lines 18-35],

wherein said audio controller is configured to control access and playing of said plurality of audio files on said computer subsystem, and wherein said audio controller comprises a switch [two operating states having 'audio CD mode and PC mode'] and a drive interface [e.g., mini CD-ROM device driver 68 in fig. 2].

9. As for claim 60, Jacobs et al teach detecting if said computer system is in said active state [PC mode in col. 4, lines 18-42]; and detecting if said computer system is in said inactive state [audio CD mode in col. 4, lines 18-35].

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 43-48, 51, 52, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al. [6,279,056 B1] in view of Lee [US 6,292,440 B1].

As for claim 43, Jacobs et al do not expressly disclose said audio data comprises compressed audio data and said controller further comprises decoder circuit configured to receive said compressed audio data and output decompressed audio data. Lee teaches an audio controller [MP3 car player] having a decoder circuitry receiving compressed audio data and outputting a decompressed audio data [col. 1, lines 58-62]. At the time the invention was made, one of ordinary skill in the art would have been motivated to implement the cited reference in order to provide a capability of not only playing a conventional audio files but also playing compressed audio files.

12. As for claims 44 and 55, Lee teaches said decoder comprising a buffer memory for temporarily storing of said decompressed audio data [FIFO 507 in fig. 2].

13. As for claims 45 and 56, Lee teaches said buffer memory comprising a first-in-first-out (FIFO) memory [FIFO 507 in fig. 2].

14. As for claims 46 and 57, Lee teaches said decoder further comprising a digital to analog circuit for receiving said decompressed audio data and for generating an analog audio data signal [col. 1, line 66-col. 2 line 3].

15. As for claims 47 and 58, Lee teaches said decoder comprising an interface circuit for receiving said decompressed audio data and for communicating with an external digital to analog converter [Digital/Analog Converter 600 in fig. 1].

16. As for claim 48, Jacobs et al teach a liquid crystal display (LCD) interface for generating at least one signal to an LCD display [LCD bias/ctrl 54 in fig. 1]. However,

Jacobs et al do not explicitly disclose the LCD display displaying directory data associated with said drive. Lee teaches an LCD display for displaying directory data associated with a drive [col. 2, lines 17-20: LCD interface unit 301 in fig. 1]. At the time the invention was made, one of ordinary skill in the art would have been motivated to implement the cited reference in order to increase user friendliness for playing audio files.

17. As for claim 51, Jacobs et al teach a processor for controlling said state of said switch [see fig. 3] and Lee teaches a processor for controlling said decoder [fig. 1].

18. As for claim 52, Lee teaches a flash memory for storing data and a plurality of commands for use by said processor for controlling said decoder circuitry [col. 4, lines 6-9].

19. As for claim 54, Jacobs et al teach a controller [e.g., "firmware within the audio CD ROM 60" in fig. 2 and col. 5, lines 40-47] for enabling [col. 2, lines 7-21] a plurality of audio files to be played on a computer subsystem [e.g., CD-ROM drive 28 in fig. 1] of a computer system [computer system S in fig. 1] if said computer system is in an inactive state, said controller comprising:

a switch [operating states] having a first state [non-audio CD mode or PC mode in col. 4, lines 36-42] and a second state [audio CD mode in col. 4, lines 27-35], wherein said switch in said first state decouples ['BIOS ROM 62 is coupled and the audio CD ROM 60 is decoupled' in col. 5, lines 29-37] said controller from said computer subsystem and from an audio IC [e.g., CD-ROM drive controller 102 in fig. 1] coupled to said computer subsystem, and wherein said switch in said first state decoupling [col. 5,

lines 29-37] said controller from said computer subsystem, said switch in said second state couples [col. 5, lines 37-39] said controller to said computer subsystem in response to said computer system being in said inactive state [without running operating system in col. 4, lines 32-35; col. 4, lines 59-64]; and

a drive interface [e.g., mini CD-ROM device driver 68 in fig. 2] configured to interface with a drive of said computer subsystem depending on a state of said switch, said drive interface is configured to access audio data on said drive if said switch is in said second state.

However, Jacobs et al do not disclose the audio data on the drive is compressed audio data and a decoder circuitry configured to receive the compressed audio data and output decompressed audio data. Lee teaches an audio controller [MP3 car player] having a decoder circuitry receiving compressed audio data and outputting a decompressed audio data [col. 1, lines 58-62]. At the time the invention was made, one of ordinary skill in the art would have been motivated to implement the cited reference in order to provide a capability of not only playing a conventional audio files but also playing compressed audio files.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILWOO PARK
PRIMARY EXAMINER

Ilwoo Park

December 20, 2007